

REMARKS

Claims 1-19 are amended, no claims are presently canceled, claims 20-24 were previously canceled, and claims 25-43 are added; as a result, claims 1-19 and 25-43 are now pending in this application.

Applicant amends claims 1-19 to clarify the recitations therein and adopt a style more consistent with standard U.S. claim drafting practice. Applicant does not intend to restrict the scope of the claims and thus believes that the claims remain entitled to a full scope of equivalents.

Information Disclosure Statement

Applicant has received the examiner's partially initialed copy of the Form 1449 filed with applicant's Information Disclosure Statement mailed January 2, 2002. Applicant believes the examiner must consider German Application No. 199 40 750.A1 because of the category listing provided for this document in the International Search Report copy included with the IDS. Applicant respectfully requests that this document be considered, and the Form 1449 initialled and returned with the examiner's next communication.

§112 Rejection of the Claims

Claims 1-19 were rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant respectfully traverses. The claims as originally presented are believed to meet the requirements of 35 USC § 112, second paragraph. Reconsideration of the rejections under 35 USC § 112, second paragraph is requested.

§102 Rejection of the Claims

Claims 1-6, 8-10, 12-15 and 18-19 were rejected under 35 USC § 102(b) as being unpatentable over Lipshutz et al. (U.S. Patent No. 5,856,174). Applicant respectfully traverses.

Claim 1 recites, in part, "which the chamber body is sealingly placed to form a capillary gap between the chamber support and the detection area of the chip the capillary gap being temperature-adjustable and flow-controllable, and wherein the capillary gap forms a single

reaction chamber and is adapted to amplify and characterize nucleic acids therein.” Applicant can not find these features in Lipshutz. For example, claim 1 recites the capillary gap forms a single reaction chamber and is adapted to amplify and characterize nucleic acids therein.

Lipshutz does not teach such a feature. In fact, Lipshutz teaches a plurality of distinct reaction chambers, see e.g., col. 2, lines 16-20, Fig. 3, Figs. 5A, 5B, 6A and 6B along with the related text of Lipshutz. Still further, the Office Action admits that Lipshutz teaches that samples are put into one reaction chamber of the device and transferred to subsequent reaction chambers via fluid channels for controlled sample processing, fluid flow and nucleic acid amplification via temperature adjustments. Moreover, applicant can not find where Lipshutz teaches or even suggests that a capillary gap is adapted to amplify and characterize nucleic acids as recited in claim 1.

As Lipshutz does not teach all of the features of claim 1 as required for a rejection under 35 USC § 102(b), applicant requests reconsideration and allowance of claim 1 and claims 2-6, 8-10, 12-15 and 18-19 depending from claim 1.

§103 Rejection of the Claims

Claim 7 was rejected under 35 USC § 103(a) as being unpatentable over Lipshutz et al. (U.S. Patent No. 5,856,174) in view of McBride et al. (U.S. Patent No. 6,296,752). Applicant respectfully traverses. Applicant asserts that claim 7 is allowable over Lipshutz and McBride for substantially similar reasons as set forth above with regard to claim 1 as McBride does not teach the features of the present claim not found in Lipshutz. Moreover, Lipshutz teaches away from the present invention as defined by claim 7 as Lipshutz specifically teaches a plurality of distinct reaction chambers for carrying out the sample acquisition, preparation and analysis operations, see e.g., col. 4, lines 23-25 of Lipshutz. Accordingly, applicant submits that claim 7 is allowable over Lipshutz and McBride, either alone or in combination.

Claim 11 was rejected under 35 USC § 103(a) as being unpatentable over Lipshutz et al. (U.S. Patent No. 5,856,174) in view of Atwood et al. (U.S. Patent No. 5,475,610). Applicant respectfully traverses. Applicant asserts that claim 11 is allowable over Lipshutz and Atwood for substantially similar reasons as set forth above with regard to claim 1 as Atwood does not

teach the features of the present claim not found in Lipshutz. Moreover, Lipshutz teaches away from the present invention as defined by claim 11 as Lipshutz specifically teaches a plurality of distinct reactin chambers for carrying out the sample acquisition, preparation and analysis operations, see e.g., col. 4, lines 23-25 of Lipshutz. Accordingly, applicant submits that claim 11 is allowable over Lipshutz and Atwood, either alone or in combination.

Claims 16 and 17 were rejected under 35 USC § 103(a) as being unpatentable over Lipshutz et al. (U.S. Patent No. 5,856,174) in view of Fodor et al. (U.S. Patent No. 5,744,101). Applicant respectfully traverses. Applicant asserts that claims 16 and 17 are allowable over Lipshutz and Fodor for substantially similar reasons as set forth above with regard to claim 1 as Fodor does not teach the features of the present claim not found in Lipshutz. Moreover, Lipshutz teaches away from the present invention as defined by claims 16 and 17 as Lipshutz specifically teaches a plurality of distinct reactin chambers for carrying out the sample acquisition, preparation and analysis operations, see e.g., col. 4, lines 23-25 of Lipshutz. Accordingly, applicant submits that claims 16 and 17 are allowable over Lipshutz and Fodor, either alone or in combination.

New Claims

Applicant herewith submits new claims 25-43. These claims are believed supported by the originally filed application. Applicant further submits that independent claim 25 is allowable over Lipshutz. Claim 25 recites, in part, “a capillary gap intermediate the chamber support and the chamber body, the capillary gap being adapted to act as a single chamber for both the reaction and characterization of nucleic acids.” Claims 26-30 depend at least in part on claim 25. Claims 31-43 depend at least in part on claim 1 and are believed to be allowable therewith.

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612-349-9587) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743

Respectfully submitted,

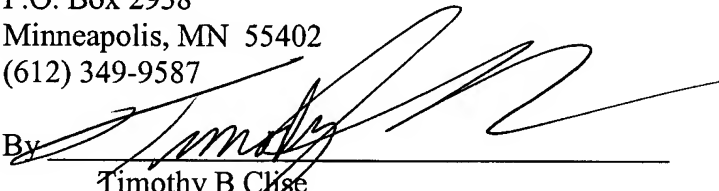
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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 28th day of October, 2003.

Candis B. Buending

Name

Signature

